

Use

pmOrange2 is primarily intended to serve as a source of mOrange2 cDNA. The flanking MCS regions make it possible to excise the mOrange2 coding sequence and insert it into other vector systems. The vector can also be used to express the mOrange2 protein in bacteria.

For Western analysis, either the Living Colors® DsRed Polyclonal Antibody (Cat. No. 632496) or the DsRed Monoclonal Antibody (Cat. Nos. 632392 and 632393) can be used to detect the mOrange2 protein.

Location of features

- P_{lac} (*lac* Promoter): 95–178
- 5' MCS (5' multiple cloning site): 264–281
- mOrange2: 282–989
- 3' MCS (3' multiple cloning site): 993–1013
- Amp^r (ampicillin resistance gene; β -lactamase): 1538–2398
- pUC origin of replication: 2546–3188

Propagation in *E. Coli*

- Recommended host strain: DH5 α TM
- Selectable marker: plasmid confers resistance to ampicillin (50 μ g/ml) in *E. coli* hosts.
- *E. coli* replication origin: pUC
- Copy number: high
- Plasmid incompatibility group: pMB1/ColE1

Excitation and emission maxima of mOrange2

- Excitation maximum = 549 nm
- Emission maximum = 565 nm

References

1. Shaner, N. C., *et al.* (2008) *Nature Methods*. 5(6):545-551.

Note: The vector sequence was compiled from information in the sequence databases, published literature, and other sources, together with partial sequences obtained by Clontech. This vector has not been completely sequenced.

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This product is subject to pending patent applications.

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